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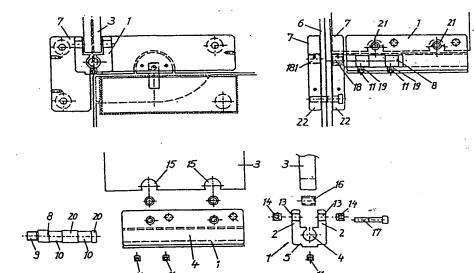
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(54) Title: FITTING ASSEMBLY



(57) Abstract: The present invention relates to a fitting assembly provided at an edge portion of a structural panel which abuts at an angle against a wall (6), and is mounted thereto. An edge fitting (1) grasps the panel (3) at an edge portion thereof, and comprises two plate members (2) which are arranged parallel to and at a distance from each other, as well as a web portion (5) connecting the plate members (2) with each other. A slide guide (4) is formed in the web portion (5) and extends in the longitudinal direction of said edge fitting (1). In said slide guide (4) a bar (8) is slidingly received and guided, with said bar (8) being designed as a locking bar whose locking end (9) protrudes from the edge fitting (1) and engages into a receiving element (18) formed at said wall (6). The edge fitting (1) is provided with a detachable fixing device by means of which the bar (8) may be detachably fixed in the slide guide (4).

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fixed at a ceiling wall, without the receiving element having to be removed from the wall. Further, the edge fitting may be disassembled from the wall without having to be separated from the panel, which is effected by pulling said edge fitting grasping the panel between its plate members off the locking bar fixed in the receiving element. As an alternative, the locking bar may also be disconnected from the slide guide at the end of the fitting assembly facing away from the receiving element so that the locking bar may be withdrawn from the receiving element without disassembling the edge fitting from the panel.

The present invention is particularly advantageous, although not limited thereto, for a fitting assembly of a skylight panel, as it permits the edge fitting to be disassembled from the glass panel, which is suspended at its upper edge, without having to disassemble the glass panel itself.

Preferably, the fixing device comprises at least one hole which extends through the web portion of the edge fitting and opens into the slide guide, through which hole a clamping screw abuts against the locking bar so that a clamping joint is formed. The hole may extend into said slide guide either from the outer surface or bottom of the web portion so that it is parallel to the plate members, or from a lateral surface so that it is perpendicular to the plate members.

According to a further development of the present invention, the edge fitting comprises a detachable clamping device by means of which the edge portion of the panel may be detachably clamped between the plate members. According to a further embodiment, the clamping devices provided at the two plate members of said edge fitting may each comprise at least one hole which extends perpendicularly to the longitudinal direction of the edge fitting, with said holes being arranged opposite to each other and each having a clamping screw extending therethrough which abuts against the panel so that a clamping joint is formed.

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In accordance with a further development, the fixing device comprises at least one hole formed at the level of the slide guide and extending perpendicularly to the longitudinal direction of the edge fitting, through which hole a clamping screw abuts at the bar so that a clamping joint is formed.

According to an advantageous further development, the web portion comprises an undercut longitudinal slot formed in its outer surface and extending in the longitudinal direction of the edge fitting, by means of which the edge fitting may be pushed onto a matching shoulder formed on a supporting base so that said shoulder is received in said longitudinal slot.

Advantageously, all the bars provided in accordance with the present invention may be formed as hollow bars.

According to a further development of the edge fitting, each of the plate members is provided with a longitudinal slot extending longitudinally in its free top surface, and the outer surface of the web portion is provided with two longitudinal slots arranged opposite the longitudinal slots in the plate. members, said longitudinal slots preferably having a semicircular cross section. Preferably, each of the longitudinal slots provided in the plate members and in the outer surface of the web portion has a supporting strip arranged thereto having).25 a longitudinal slot of semi-circular cross section formed therein, the arrangement being such that the slots in the plate members and web portions are each aligned with the slot of the associated supporting strip, with a compressible round retaining cord being placed between said mutually aligned 30 longitudinal slots. Preferably, the cross section of said round detaining cord is slightly larger than that of the channel formed by each pair of mutually aligned longitudinal slots, so that the supporting strips are not directly held by the edge fitting. The portions of the edge fitting which protrude from 35 said panel, and are thus visible, are provided with covers abutting against the edge fitting and fixed thereto so that said portions are covered. The upper and lower edges of said

in the locking position, and the extension bar 23 is fixed in the slide guide 4. The second edge fitting 1 is basically similar to the first edge fitting 1, with its slide guide 4 being pushed onto the free end of the extension bar 23. The second edge fitting 1 is fixed at the respective position on the extension bar 23 by means of two clamping screws 11 extending through holes 19 formed in the outer surface of the web portion. The panel 3 comprises two cut-outs 15 formed at its lower edge at the positions of the edge fittings 1 and having the shape of a three-quarter circle, which are engaged by two sleeves 16 received between the plate members 2.

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In the fitting assembly shown in Fig. 3, the bar 8 comprising the locking end 9 is formed integrally with the extension bar 23, with the other parts and features of the fitting assembly being similar to those shown in Fig. 2. The bar 8 is a hollow bar comprising an internal thread at its locking end. The locking end engages the receiving element 18 formed as a threaded pin which is supported in a hole provided in the mounting plate 7. The engagement is effected by the locking end 9 being inserted through a hole provided in the panelling 22. The bar 8 may have a tool receiving part (not shown) arranged centrally in the longitudinal direction thereof, which may be engaged by a tool so that the bar 8 may be rotated when it is received in the edge fittings 1 and the latter are already fixed to the panel 3.

Fig 4 shows an embodiment of the fitting assembly in particular in accordance with claim 11, wherein two edge fittings 1 are arranged such that the outer surfaces of their web portions abut against each other so that two panels 3 arranged on top of each other and abutting against one and the same wall 6 may be fixed. Each of the two edge fittings 1 comprises a slide guide 4 of the type described above, wherein a locking bar 8 is received. Each of the bars 8 has an internal thread formed at its locking end 9, and the two locking ends 9 engage two receiving elements 18 formed at a suitable distance from each other in one and the same mounting plate 7. The receiving

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Patent claims

Fitting assembly provided at an edge portion of a structural panel, in particular of a structural glass panel, with the structural panel abutting at an angle against a wall (6) at which the structural panel is mounted, the fitting assembly comprising an edge fitting (1) grasping the panel (3) at an edge portion thereof, and having two plate members (2) arranged parallel to and at a distance from each other as well as a web portion (5) connecting the plate members (2) with each 10 other and having a slide guide (4) formed therein, said slide quide (4) extending in the longitudinal direction of said edge fitting (1) and guiding a bar (8) which is slidingly received therein, with said bar (8) being designed as a locking bar whose locking end (9) protrudes from the edge fitting (1) and 15 engages into a receiving element (18) formed at said wall (6), said edge fitting (1) being provided with a detachable fixing device by means of which the bar (8) may be detachably fixed in the slide guide (4).

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2. Fitting assembly according to claim 1, with said edge fitting (1) comprising a detachable clamping device by means of which the edge portion of the panel (3) may be detachably clamped between the plate members (2).

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3. Fitting assembly according to claim 1 or 2, with said wall (6) being formed as a panel at which a mounting plate (7) is fixed, said mounting plate (7) being provided with the receiving element (18) and engaged by the locking end (9).

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4. Fitting assembly according to one of the claims 1 to 3, with the locking end (9) being threaded.

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5. Fitting assembly according to claim 4, with the locking end (9) being designed as a threaded pin, and the receiving element (18) being provided with a threaded tap hole wherein said threaded pin may be received.

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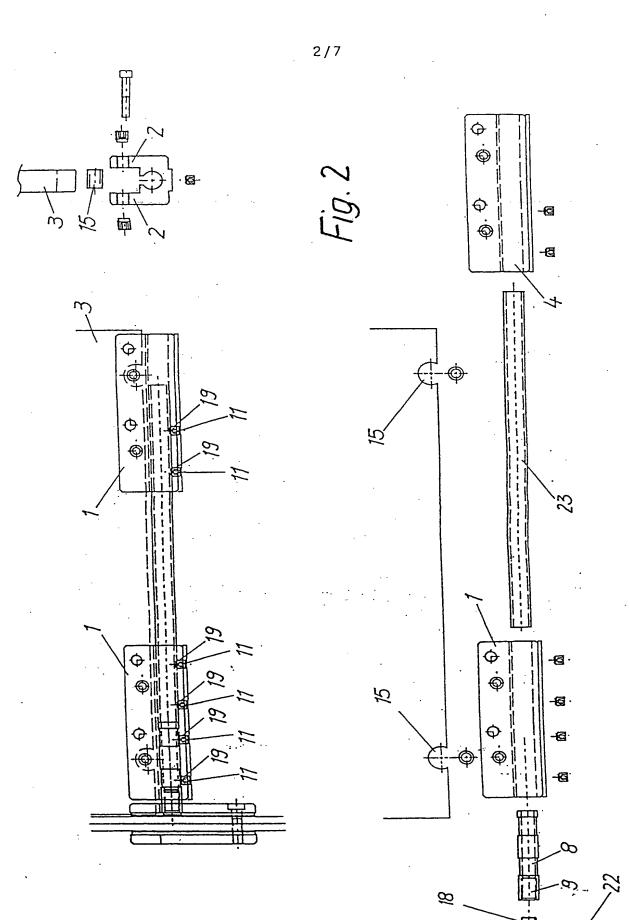
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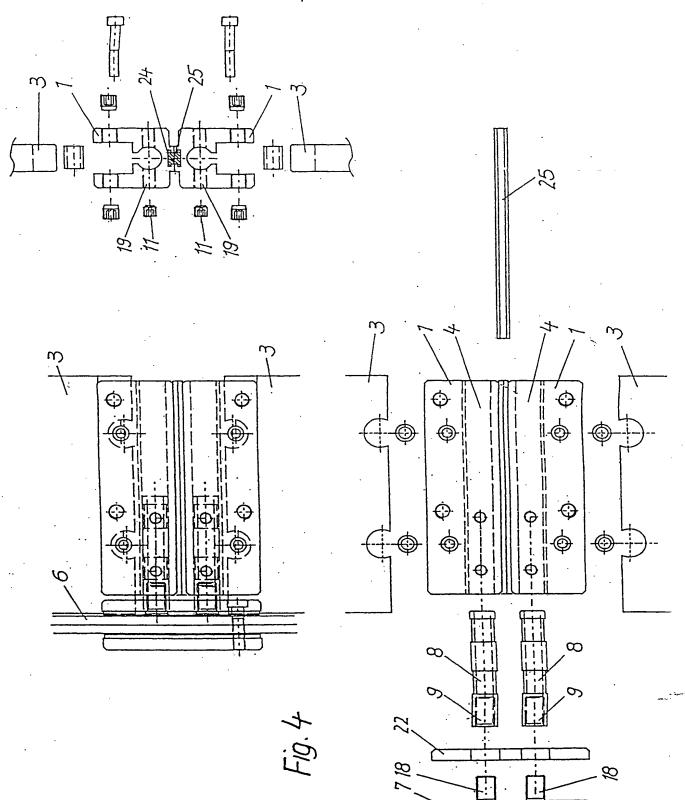
strips (29), which are each provided with a longitudinal slot (30) of semicircular cross section, are arranged on the plate members (2) and at the outer surface of the web portion (5) so that they face the respective longitudinal slots (28) provided in the plate members (2) and in the outer surface of the web portion (5), with a compressible round retaining cord (31) being placed between each pair of said facing, mutually aligned longitudinal slots (28, 30), and wherein the portions of the edge fitting (1) which protrude from said panel (3) and are thus visible are covered by covers (32) which abut against the edge fitting (1), each of said covers (32) being provided with doubly bent edges at two of its opposing ends which doubly bent edges grasp the respective two supporting strips (29) extending parallel to the plane defined by the panel (3) so that said supporting strips (29) are pressed against the compressible round retaining cord (31).

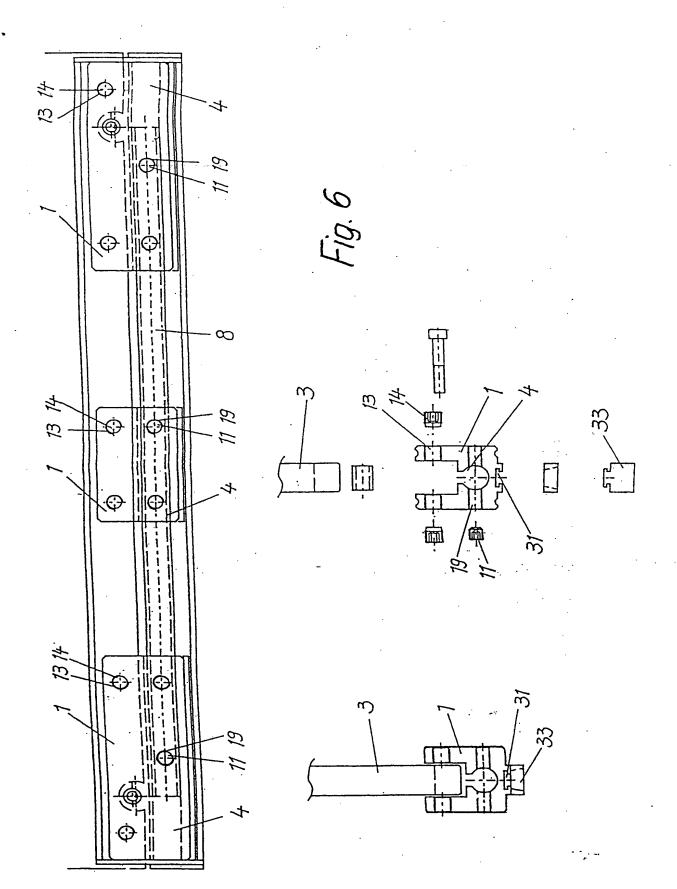
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